

# Climate Change Draft Scoping Plan

## Economic and Technology Advancement Advisory Committee

July 31, 2008

California Air Resources Board

# Today's Presentation

- Draft Scoping Plan Overview
- Preliminary Recommendation
- Additional Measures Under Consideration
- Scoping Plan Evaluations
- Environmental Justice Advisory Committee Update

# Draft Scoping Plan

- By 2020, reduce greenhouse gas (GHG) emissions statewide to 1990 levels
- California's GHG strategies will also:
  - Protect and improve public health
  - Promote the development of clean energy
  - Foster opportunities for economic growth
  - Provide a model for regional, federal, and international programs
  - Put State on a path to 2050 goal

# Draft Scoping Plan Development

- Contributions from Climate Action Team Subgroups
- Input from EJAC, ETAAC, and MAC
- Formal workshops & stakeholder work group meetings
- Public solicitation
- Extensive outreach at meetings, conferences and other events

# Status

- Draft Plan released June 26
  - Request comments by August 1
- Appendices to Draft Plan released July 22
  - Request comments by August 11
- Supplemental evaluation release summer 2008
  - Workshop
- Stakeholder meetings (July – September)
- Community meetings (July-August)
- *Proposed Scoping Plan* release October 3
- Board consideration of *Proposed Scoping Plan* on November 20



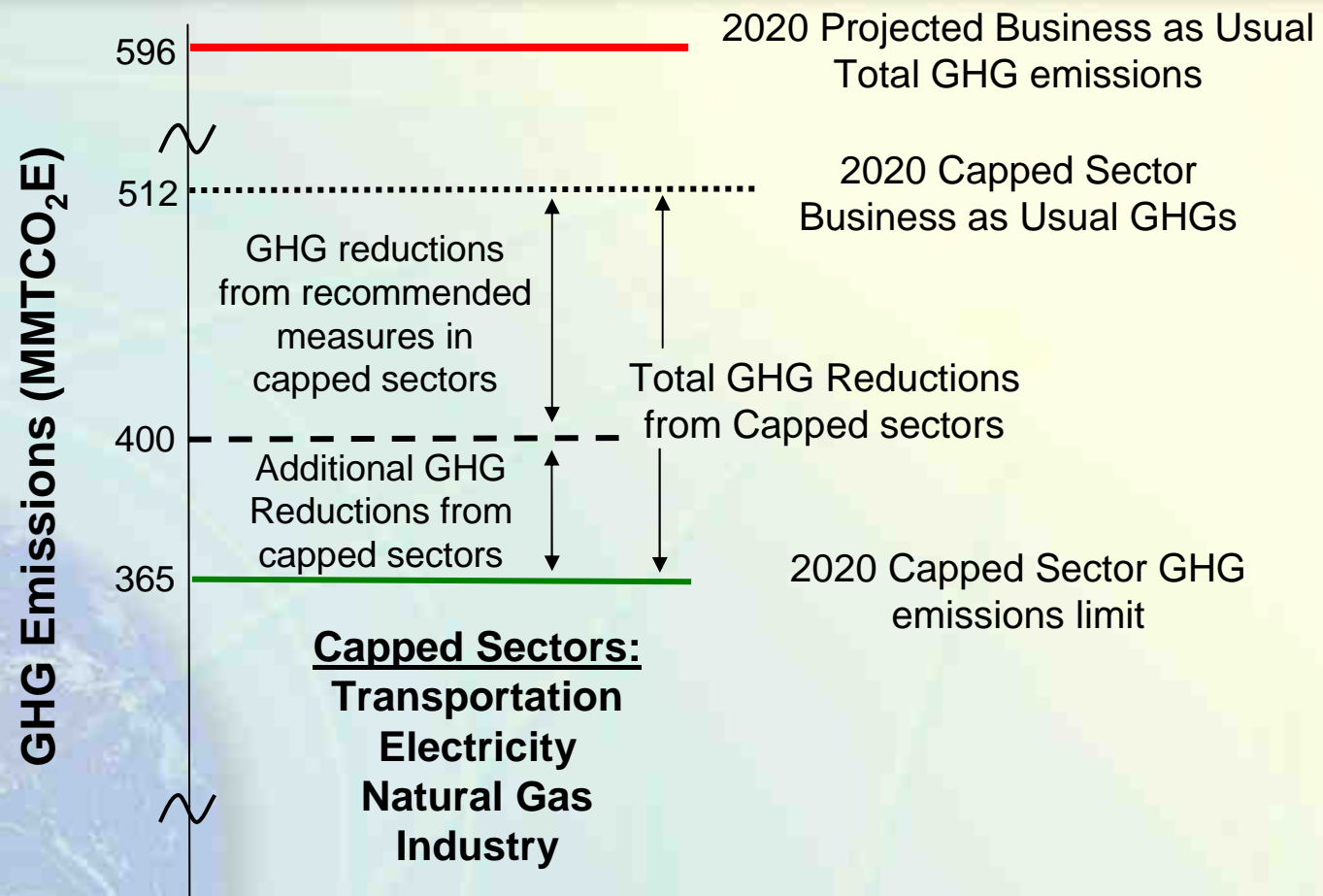
# **Preliminary Recommendation**

## Draft Scoping Plan Recommendations

- Mix of strategies that combine market mechanisms, regulations, voluntary measures, fees, and other programs through both new and existing programs
- Key elements:
  - Energy efficiency programs
  - 33 percent Renewables Portfolio Standard
  - California cap-and-trade program linked to Western Climate Initiative
  - Existing laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard
  - Targeted fees to fund implementation



# Structure of the Draft Plan





# Recommended Measures

Recommended Reduction Strategies	Sector	2020 Reductions (MMT <sub>CO<sub>2</sub>E</sub> )
State Government	Various	1-2
California Cap-and-Trade Program Linked to WCI		
California Light-Duty Vehicle GHG Standards	Transportation	31.7
Energy Efficiency	Electricity Comm/Resid Nat Gas	26.4
Renewables Portfolio Standard (33% by 2020)	Electricity	21.2
Low Carbon Fuel Standard	Transportation	16.5
High Global Warming Potential Gas Measures	High GWP	16.2
Sustainable Forests	Forests	5
Water Sector Measures	Water	4.8
Vehicle Efficiency Measures	Transportation	4.8
Goods Movement	Transportation	3.7
Heavy/Medium Duty Vehicles	Transportation	2.5
Million Solar Roofs (Existing Program Target)	Electricity	2.1
Local Government Actions and Regional GHG Targets	Land Use/Local Govt	2
High Speed Rail	Transportation	1
Landfill Methane Control	Recycling & Waste	1
Methane Capture at Large Dairies	Agriculture	1
Energy Efficiency/Co-Benefit Audits for Large Industrial Sources	Industrial	TBD
Additional Emissions Reduction from Capped Sectors		35.2
<b>Total Reductions</b>		<b>169</b>



# **Other Measures Under Evaluation**

# Sector-Based Measures

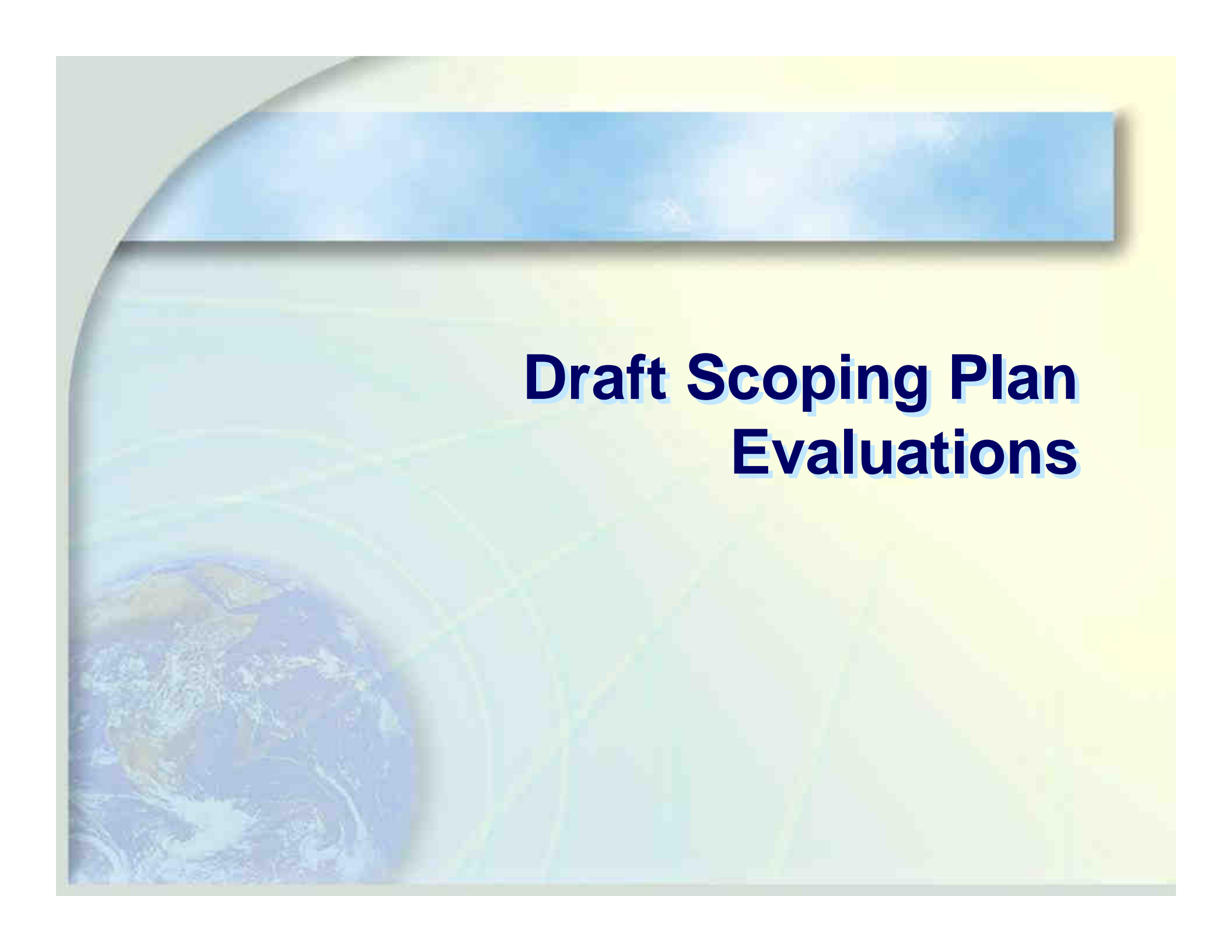
- Transportation
  - Market-based strategies
- Electricity/Energy
  - More aggressive efficiency programs
  - Reduce coal-fired electricity
- Industry
  - Refineries
  - Cement production
  - Glass manufacturing
  - Boilers and stationary engines

# Flexible Compliance Mechanisms

- Offsets
  - Rigorous criteria necessary to maintain environmental integrity
  - ARB must adopt methodologies and enforcement regulations
  - Intention to establish an offset limit such that a significant portion of reductions occur within California
- Upstream Carbon Fee
  - Use carbon pricing to achieve reductions
  - Price would be determined through economic models
  - Provides less certainty of meeting 2020 goal

# Potential Use of Revenues

- California Carbon Trust
  - Use of revenues for the public good
- Other potential uses:
  - Support AB 32 reduction goal
  - Achieve environmental co-benefits
  - Local government incentives & consumer rebates
  - Climate change adaptation
  - Community benefits
  - Consumer rebates
  - RD&D funding
  - Worker transition assistance



# **Draft Scoping Plan Evaluations**

# Potential Economic Impacts

## Preliminary Evaluation

- Overall savings from implementation of Draft Scoping Plan expected to exceed costs
  - Many measures increase energy efficiency
- Additional analyses in progress
  - Conducting macro-economic modeling using E-DRAM and BEAR
  - Modeling of economy, energy, emissions interaction using Energy 2020



# Environmental/ Public Health Analysis

- Examine in the context of ARB's traditional public health programs
  - Assessment of environmental impact of proposed measures (air, water, land, waste disposal and hazardous waste, biological resources)
  - Public health impacts based on environmental assessment
- Expect statewide reductions in fossil fuel use and improved combustion efficiency
- Preliminary health benefits for 2020
  - Include 340 avoided premature deaths, 57,000 avoided work loss days
  - Total economic valuation of \$1.5-2.4 billion

# Societal Impacts

- Evaluation required when regulations are adopted
  - Intend to evaluate preliminary recommendation
- Consider factors such as:
  - Energy diversity, mobility, regressivity and job creation
- Will also consider ways to direct public and private investment toward most disadvantaged communities

# Evaluation Supplement

- Evaluation supplement will be available in summer 2008
  - Results of economic modeling for several scenarios for achieving AB 32 goals
    - Preliminary recommended measures
    - Use of additional regulation and programs
    - Use of carbon fee
  - Results of environmental/ public health analysis
- Workshop will be held on the supplement after its release
- Written comments will also be welcome

# Scoping Plan Implementation

- ARB initiating a fee regulation rulemaking this summer to fund AB 32 administrative costs
- Two years to adopt AB 32 measures
  - Regulatory development will follow normal public process
  - Extensive stakeholder outreach and involvement
- Implementation and enforcement critical
- ARB must monitor implementation
- Required to re-visit Scoping Plan in 5 years

## For Additional Information:

- ARB Climate Change Web Site  
(To stay informed – sign up for list serve)  
[www.arb.ca.gov/cc/cc.htm](http://www.arb.ca.gov/cc/cc.htm)
- California Climate Change Portal  
[www.climatechange.ca.gov](http://www.climatechange.ca.gov)
- Comments on the Draft Scoping Plan  
[www.arb.ca.gov/cc/scopingplan/spcomment.htm](http://www.arb.ca.gov/cc/scopingplan/spcomment.htm)



# **Environmental Justice Advisory Committee Update**